# **MDT Research Programs Report Requirements**

Research results are of little value if not disseminated; therefore, it is the normal practice of the Montana Department of Transportation (MDT) Research Program to exert every reasonable attempt to publish and to distribute widely the reports submitted on each project. It is desirable to maintain consistency in style of presentation.

This document is a living document, changing as necessary. Please make sure you have the most recent version when using to prepare reports.

# **GENERAL REQUIREMENTS**

# **Report Quality**

The acceptability of reports is judged by three criteria: (1) fulfillment of project objectives as set forth in the contract, (2) adequacy of documentation, and (3) clarity of presentation. Reports should be complete in all their parts, organized appropriately to serve their purposes, correct in matters of fact and documentation, and edited for basic uniformities of style and usage. Time and effort devoted to the preparation of a quality report are clearly worthwhile investments, because poorly organized and poorly written reports will not be acceptable in fulfilling contract requirements and will be returned for editing prior to MDT review. Draft reports should reflect the best effort by the consultant and should be considered in final form.

# **Copies Required**

All reports must be submitted electronically, in both MSWord and PDF\*. Hard copies of these reports are not required.

\*Special note regarding PDF documents: All PDF documents must be prepared using the setting to create fonts as outline. Doing this ensures fonts are sent as "images/outlines" rather than as the actual font, which others may not have.

# **Report Deadlines**

Various progress reports and a final report are required for all research projects. A draft final report is due no later than 2 months prior to the contract end date. MDT Research staff will review well-written draft final reports and provide comments no later than 1 month prior to the end of the contract date. It is the responsibility of each PI to ensure all comments are incorporated into the final report. If not all comments are addressed in the final report. MDT will again provide comments for incorporation into the final report. This process will continue until a satisfactory report is accepted by MDT.

#### PROGRESS REPORTS

#### REPORT ORGANIZATION

#### **Contents**

- 1. All pages must be numbered.
- 2. The title page must contain:
  - a. Project title.
  - b. Type and Number, if applicable, of report (for ex: Quarterly Progress Report #1).
  - c. Period covered.
  - d. Prepared by statement.
  - e. Prepared for statement.
  - f. Date (Month, Year).
- 3. These reports must be in narrative format.
- 4. The body of these reports must include the following information.
  - a. Discussion of each of the major tasks outlined in the work plan and whether they have been completed or are still in progress.
  - b. Planned and actual time schedule for each of the tasks, including the overall percent complete using the expended versus planned budget.
  - c. Discussion of financial, staff, equipment and technical problems as they affect the individual tasks, as well as their resolution or attempts at resolution.
  - d. Discussion of major accomplishments or discoveries and their significance especially with respect to implementation.
  - e. Fiscal expenditures.

#### **STYLE**

Use instructions given below for final reports, as appropriate.

#### FINAL REPORTS

# REPORT ORGANIZATION

# **Contents**

- 1. MDT will provide the cover page.
- 2. Page i is the title page. It holds this page number, but is not physically numbered. The title page should include:
  - a. Title
  - b. Prepared by statement
  - c. Prepared for statement
  - d. Date (Month, Year)
- 3. Page ii is the Technical Report Documentation Page (Click here to download this page). Sections 1, 4-5, 7, 9, and 11-21 need to be completed. All sections, except 1 and 11 need

- to be completed in draft reports. The abstract must follow NISO standards http://www.niso.org/standards/resources/Z39-14.pdf.
- 4. Page iii is the Disclaimer/Alternative Format Statement page. (Click here to download this page). If the author(s) wishes to include acknowledgements, this statement should also be placed on this page.
- 5. Page iv begins the Table of Contents. The Author chooses Table of Contents level of detail; however, this must be consistent from section to section. A List of Figures and List of Tables must follow the Table of Contents. These last two items can be on the same page, if the author so chooses. Pages numbers must occur on these pages, with a dotted line connecting the contents and the page number.
- 6. In the body of the report, the headings can be what is appropriate, but are usually along the lines of Introduction/Background, Materials and Methods, Results, Conclusions, Recommendations, Implementation, and References/Literature Cited. Appendices can follow this with supplementary material.

#### **STYLE**

To achieve uniformity and consistency, MDT Research staff use standard reference works for guidance. The latest edition of *Merriam-Webster's Collegiate Dictionary* is the preferred authority for spelling and capitalization. The *Chicago Manual of Style* and *Words Into Type* are also generally followed. Following are some rules of style that are designed to ensure reasonable uniformity and consistency.

# **Formatting**

- 1. Type all material 1 to 1.5 spaced, including quotes, references, and so forth on 8½- x 11-in. paper.
- 2. All margins should be 1". Some deviation is allowed on a page-by-page basis to allow for aesthetics.
- 3. Begin each chapter or appendix on a new page.
- 4. Do not add blank pages.
- 5. All pages must be numbered.
- 6. Paginate the front matter with lowercase roman numerals at the bottom of the page. The Title page holds page i, but is not physically numbered.
- 7. Paginate the body of the report consecutively with Arabic numerals at the bottom of the page.
- 2. The Appendices, if any, can be numbered either sequentially from the main body of the report or as A-1, A-2, B-1, etc.
- 3. All headings at the same level must be in the same font/format.

#### **Tables**

1. Tables are used to present short descriptions or numerical listings that are most clearly and effectively presented in tabular form. They should be self-explanatory and should supplement, not duplicate, information given in the text and illustrations.

- 2. All Tables must be placed in the text shortly after the first reference to each Table; not more than 1 page away from the first reference. Don't split paragraphs with Table(s).
- 3. Title all tables above each table to identify their contents.
- 4. Arrange tabular matter carefully so that the intended comparisons are clear. Choose appropriate vertical columns to provide reasonable balance to horizontal and vertical dimensions.
- 5. When a dash (-) or other symbol is used in a table, **indicate its meaning** in a footnote (e.g., missing data, data not available or applicable).
- 6. Combine tables of similar form in order to reduce space requirements, eliminate heading duplications, and permit easier comparison of values.
- 7. Check the accuracy of all totals included in tables.
- 8. Stay away from color. If you feel color must be used, this must be preapproved by MDT.

# **Figures**

- 1. Figures should convey information clearly and completely.
- 2. All Figures must be placed in the text shortly after the first reference to each Figure; not more than 1 page away from the first reference. Don't split paragraphs with Figure(s).
- 3. All figures must be of sufficient quality such that a copy of the printed original is still of sufficient quality for publication.
- 4. Caption all figures below each figure to identify their contents. Cite the outside source of the figure if applicable.
- 5. Use figures of comparable size and scale when they are intended to be compared.
- 6. Stay away from color. If you feel color must be used, this must be preapproved by MDT.

#### **References**

Reference sections, unlike bibliographies, list only sources cited in the text and in the order of citation. (Bibliographies generally include all sources consulted, not just those cited in the text, and generally are organized alphabetically.) We prefer reference sections to bibliographies; however, bibliographies are acceptable as an addition to the literature cited/references section. The listing of references demands absolute accuracy. Because they come from a wide variety of sources, definite rules for the identification of reference materials have been adopted. They should be carefully observed.

1. List numerous references together at the end of the text in the **order in which they are cited in the text**. The preferred reference within the text consists of Author's last name and year in parentheses. Alternatively, items may be referenced in the text by an italic (or underscored) Arabic numeral in parentheses at the pertinent point.

Example: (Beskow 1998) or Beskow (14) says.

- 2. Be sure that:
  - a. Names are spelled correctly and consistently.
  - b. Initials and dates are correctly given.
  - c. Title of article is given as published.
  - d. ACS (American Chemical Society) abbreviations are used for periodicals and other standard publications.

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- e. Avoid unpublished references. Do not use expressions such as Paper prepared for Presentation or Paper presented at, when publication has occurred. Give only the published location.
- f. Print the names of journals, proceedings, bulletins, and so forth in italics; print the titles of papers in roman and in quotation marks, thus: Jones, J. J., "A Technical Paper." *Proceedings*, American Society for Testing Materials, Vol. 22, Part II (1922) p. 450.
- g. In citing (and in listing), if reference is made to the whole work, give the total number of pages; if only to a specific part, give the pages involved. If several separate pages or parts of the same work are referred to at different places in the text, give the entire work in the reference list; in the text, simply use (3, pp. 16-21), (3, p. 24), (3, Ch. 5). A reference in the list should not be repeated or be referred to by the use of ibid., loc. cit., and so forth.
- h. Be sure that entries agree with text and other citations of references. Remember that text revisions may require renumbering or other reference changes and vice versa.
- i. Use the following guide for treatment of reference items [Note: the names and initials of authors (including joint authors) should be inverted]:

#### Periodical

Egar, S. L., "Resurfacing Methods Used Successfully on Chicago's Streets." *Engineering News-Record*, Vol. 243, No. 18 (June 23, 1963) p. 25.

# **Proceedings**

Leadabrand, J. A. and Norling, L. T., "An Example of Soil-Cement Treatment." 2nd Int.Conf. on Soil Mech. and Found. Eng., Rotterdam, The Netherlands, Proceedings Vol. 4 (1956) pp. 62-84.

# **Title**

"New Cement Additive." Engineering, Vol. 196, No. 5072 (July 1963) p. 9.

#### **Abstract**

"Directional Signing on Metropolitan Freeways." Automobile Club of Southern California, Los Angeles, Calif. (July 3, 1963) 11 pp. *Highway Research Abstracts*, Vol. 34, No. 6 (June 1964) p. 10.

#### **Corporate Author**

Automotive Safety Foundation, "Traffic Control and Roadway Elements: Their Relationship to Highway Safety." Washington, DC (1963) 124 pp.

#### Report

Author(s), "Title." *NCHRP Report XXX*, Transportation Research Board, National Research Council, Washington, DC (1975) xx pp.

#### **Book**

Author(s), Title. Publisher (year) xx pp.

# Part of Book Only

Hickok, B., "Highways." *Sources of Information in Transportation*, Evanston, IL, Transportation Center, Northwestern Univ. (1964) pp. 201-234.

# **State DOT Report**

New York Dept. of Public Works, "Asbestos Admixture in Asphalt Concrete." Physical Research Proj. No. 11. *Engineering Research Series*, Research Rept. RR60-5 (Dec. 1960) 22 pp.

#### **Congressional Document**

U.S. Cong., 77th 2d SESS., Committee on Roads, Proposed Highway to Alaska. Hearings...on H.R. 3095, a bill authorizing the construction of a highway to Alaska, Feb. 4, 5, and 6, 1942. Washington, DC, U.S. Govt. Print. Office (1942) 151 pp.

# **Bibliography**

Bibliographies, unlike reference sections, may list sources consulted but not then cited in the text. Bibliographies generally are organized alphabetically. (Reference sections list only the sources cited in the text and in the order of citation.) A Bibliography may be included as an addition to the literature cited/references section, arrange the entries as one of the following:

- 1. **Alphabetical Arrangement by Author.** Arrangement by author will include names of persons (authors, editors, and compilers) and corporate bodies (governmental agencies, societies, institutions, and so forth). In listing federal governmental agencies,"U.S." should precede the name of the agency so that such entities may be grouped in the bibliography.
- 2. **Chronological Arrangement.** A bibliography may be arranged chronologically to show the development of a subject. Entries are then arranged alphabetically by author under the year.
- 3. Classified Subject Arrangement. This arrangement is made on the basis of a systematic division of the subject of the bibliography. Alphabetical author arrangements are used in such lists under each subject.

Each entry in a bibliography provides information that will result in ready identification. Entries must be sufficiently detailed, intelligible, and consistent in form with the style followed throughout the bibliography.

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An annotation, in the form of a paragraph, may be placed after the main body of the entry. Compress the annotation to the fewest possible words.

# Abbreviations, Acronyms, And Symbols

Abbreviations, acronyms, and symbols must be fully defined the first time they are used in the report; the definition should be given first followed by the abbreviated term in parentheses.

#### **Use Of Copyrighted Material**

If already published material is used in a report (as in quotations of 50 words or more or use of tables and illustrations), extreme care is necessary to comply with any copyright requirements that may apply. If there is any doubt about whether reprinted material is copyrighted, it should be checked with the author and/or publisher. Permission in writing to use copyrighted material must then be obtained by the research agency, not by MDT staff, from both the author and the publisher. Copies of all correspondence regarding permission to use copyrighted material, particularly the final letters granting permission, should be transmitted to NCHRP/TCRP, where they will become part of the permanent file on the particular report.

Particular attention is called to the fact that practically all commercial journals are copyrighted *in toto*, as also are most association journals, all commercial books, many association books and manuals, many special reports (e.g., ASTM, TRB, and so forth), and all newspapers. Because the United States of America is bound by many foreign copyrights, any use of foreign materials should be checked as carefully as materials published in the United States.

After permission to use copyrighted material has been obtained, MDT should be given both a bibliographical reference to the source and a specific tie to the referenced material, particularly figures. For text material, the edition and page (preferably located by lines) should be cited; for tabular material, the page and table number should be given.